# ISST Status Report to the Science and Technology Committee

22 August 2003

# Outline of Briefing

- ISST Forum
- Status of preliminary recommendations
- ORD verification statement and general discussion on verification
- WR SOO/DOH whitepaper implementation plan
- ISST roadmap and prioritization of tasks

# ISST Forum

- Recognizes value of broad discussion and feedback
- Provides two-way exchange of ideas
- Maintains small, close-knit and efficient team

# Status of preliminary recommendations submitted to S&T Committee

- Immediate and optimal use of SBN. Use SBN 'lulls' to transmit additional high resolution NCEP model data to the NWS field offices with the understanding that some "data latency" is acceptable. Approved and being implemented.

- Enhancements to the GFE. Daily Forecast Critique (DFC); ingest and use of real-time (Nowcast) data in GFE; and "Smart Init" improvements and modifications. Approved and being implemented.

- MDL's expanded MOS development. Endorsed by S&T Committee.

- Initial review of SOO/DOH recommendation for the inclusion of probabilistic information. Draft plan completed; will begin meeting with NWS and non-NWS experts to assess feasibility of plan.

# Verification needs

- ISST distributed a brief statement about verification specific to ORD
- NVIWT plan is apparently stalled
- We continue to hear that this is needed for many reasons
- This must be pushed to the highest priority

# WR SOO/DOH whitepaper implementation plan

- Primarily a summary and extension of the WR SOO/DOH spring workshop
- Distributed a few weeks ago for review and comment
- Final form provides a detailed set of recommendations and approaches
- Briefing template of plan will be available some time next week

# ISST Roadmap

- Where are we going?
  - We are seeking focused solutions and recommended courses of action that ensure scientific and technological integrity of the NWS digital forecast process.
  - We are looking for both short-term opportunities, and long-term solutions.
- This requires we recognize the important issues.
  - WR SOO/DOH whitepaper and implementation plan
  - Input from SOOs, DOHs, forecasters, etc.
- We must establish communication links with NWSH, Regional headquarters, and the field.

# Setting priorities

With everything on the table, we looked at issues according to:

- operational significance
- likelihood of success
- Ease of implementation
- NWS policy
- availability of assistance from National Centers, research labs, universities, etc.

# Highest priority issues

1.1 Near-term impact

- Review grid definitions (NWSI 10-506)
- Downscaling to NDFD resolution
- Tropical Cyclone Forecast (TCM) grids

1.2 Long-term impact

- Verification
- Analysis of record
- Climate grids

# Remaining issues

- 2nd tier (not in priority order):
  - NDFD process
  - probabilistic information
  - downscaling
  - gridded MOS
  - longer term issues raised from review of 10-506

- 3rd tier:
  - "the third dimension" – adding vertical levels

- Issues requiring ongoing attention:
  - NDFD process
  - change management process
  - GFE enhancements
  - defining "developmental" vs. "experimental" vs. "official"
  - acquiring additional SBN data

# The Future…

- Roadmap must offer flexibility
  - Keep options open
  - Expect new issues to arise
- Encourage feedback
- Maintain focus on the ISST “Vision”